# TECHNICAL REVIEW DOCUMENT FOR OPERATING PERMIT 950PGA028

to be issued to:

Tri-State Generation and Transmission Association – Rifle Generating Station
Garfield County
Facility ID 0450057
Prepared by Geoffrey Drissel
March 2010

## I. Purpose

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewal operating permit proposed for this site. The original Operating Permit was issued May 1, 1999. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted November 28, 2008, previous inspection reports and various e-mail correspondence. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <a href="http://www.cdphe.state.co.us/ap/Titlev.html">http://www.cdphe.state.co.us/ap/Titlev.html</a>.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

## **II.** Source Description

This facility is a cogeneration plant defined under the standard industrial classification code of 4911. Electricity is generated with three natural gas fired combined cycle turbines equipped with duct burners to supplement the exhaust heat. The exhaust heat is used in a Heat Recovery Steam Generator (HRSG) to generate steam for a steam turbine that also generates electricity. A greenhouse complex formerly associated with the generation facility has been removed. A fourth gas turbine is onsite to be used only for spare parts, no fuel hook-ups or

power line are permitted. The facility is located at 0056 County Road 352 in the city of Rifle, Colorado. Garfield county is designated as attainment for all criteria pollutants. There are no affected states within 50 miles of the facility. The following Federal Class I areas are located within 100 kilometers of the facility: Flat Tops Wilderness Area, Maroon Bells-Snowmass Wilderness Area, and the West Elk Wilderness Area. The facility has certified that they are not subject to the Accidental Release provisions of section 112(r) of the Clean Air Act. Facility wide emissions are as follows:

	Current	2007
<u>Pollutant</u>	PTE (tpy)	Actual (tpy)
NOx	240.7	74.1
VOC	27.0	9.0
CO	114.4	38.2
PM	36.44	11.8
$PM_{10}$	36.44	11.8

Potential emissions are based on emission limits in the current Operating Permit. Actual emissions are based upon a field inspection report submitted in March 2008. This source is required to provide an updated APEN for each emission unit in the event that emissions of NOx increase 5% or 50 tons per year and/or CO or VOC increase 5 tons per year above the level reported on the last APEN submitted to the APCD.

#### III. Discussion of Modifications Made:

#### Source Requested Modifications

The source requested that the following changes be made to the renewal Operating Permit:

- Revisions to the Responsible Official and the Facility Contact Person
- Incorporation of revisions to the Operating Permit resulting from a minor modification requested in the latter part of 2008

#### Other Modifications

In addition to the requested changes, the Division has included changes to make the permit consistent with recently issued permits, to include comments made by the EPA on other Operating Permits, to reflect updated and current Regulatory language, as well as to correct errors or omissions identified during review of this renewal. These changes are as follows:

### Section I - General Activities and Summary

- Condition 1.1 was revised to reflect the most current language.
- Condition 1.4 was revised to reflect the most recent references.
- Condition 3 as revised to reflect the most current language regarding the PSD status of the source.

## Section II - Specific Permit Terms

• The language regarding the presumption of compliance with the opacity standard if natural gas is used as fuel was updated to reflect the current version.

### Section III – Permit Shield

The shield citation was updated to reflect the most current reference.

## Section IV - General Conditions

The General Conditions section was replaced with the most current version.

### **Appendices**

- Appendices B and C were revised to reflect the current versions.
- The EPA addresses in Appendix D were updated.